

What is claimed is:

1. A portable device for measuring the pressure in an automobile air conditioning system, comprising:

a hand-held housing, including:

a socket adapted to connect to a service port of an automobile air conditioning system;

an internal passage in communication with said socket;

a pressure gauge disposed in said housing and selectively in communication with said internal passage; and

a valve interposed between said internal passage and said gauge, said valve biased into a closed position sealing off said internal passage from said pressure gauge,

wherein when said socket is engaged to a service port of an automobile air conditioning system, gas from the automobile air conditioning system enters said socket, passes through said valve, and is read by said pressure gauge.

2. A portable device for measuring the pressure in an automobile air conditioning system according to Claim 1, further comprising reciprocatable means for opening said valve against said valve bias.

3. A portable device for measuring the pressure in an automobile air conditioning system according to Claim 2, said reciprocatable means comprising:

a button having a first end protruding from said hand-held housing and a second end having a ramped portion, said button biased to protrude from said hand-held housing;

a pin having a first pin end in contact with said ramped portion of said button and a second pin end in contact with said valve,

wherein when said button is depressed, said first end rides up said ramped portion and said second end raises said valve into an open position to allow pressurized gas trapped on a gauge side of said valve to be released via said socket to reset said gauge.

4. A portable device for measuring the pressure in an automobile air conditioning system according to Claim 3, wherein said valve is biased via a first spring and said button is biased via a second spring.

5. A portable device for measuring the pressure in an automobile air conditioning system according to Claim 3, said distal end of said button further comprising a rim, and said device further comprising a retainer engageable with said rim which retains said button within said housing and prevents said button from exiting said housing.

6. A portable device for measuring the pressure in an automobile air conditioning system according to Claim 3, said second end of said pin having a greater diameter than said first end.

7. A portable device for measuring the pressure in an automobile air conditioning system according to Claim 3, wherein the length of said pin is at least twice as long as said diameter of said second end.

8. A portable device for measuring the pressure in an automobile air conditioning system according to Claim 1, wherein said socket comprises a projection centrally disposed in said socket, wherein when said socket is engaged with an automobile air conditioner service port, said projection opens a valve on the service port.